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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------|------------------|
| 10/628,350 | 07/29/2003 | Masanori Fukui | 238236US-2X | 4502 |
| 22850 7590 11/01/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET | | | EXAMINER | |
| | | | DEHGHAN, QUEENIE S | |
| ALEXANDRIA | A, VA 22314 | • | ART UNIT PAPER NUMBER | |
| | | | 1791 | |
| | • | | | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 11/01/2007 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

| | Application No. | Applicant(s) | | | | |
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| Office Action Summary | 10/628,350 | FUKUI ET AL. | | | | |
| omce Action Gammary | Examiner | Art Unit | | | | |
| The MAILING DATE of this commission and | Queenie Dehghan | 1791 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timurill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. hely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | · | | | | |
| 1) Responsive to communication(s) filed on 24 August 2007. | | | | | | |
| 2a)⊠ This action is FINAL . 2b)☐ This | This action is FINAL . 2b) This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-17 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1-17 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or | vn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the original transfer of the original transfer of the second or declaration is objected to by the Example 11). | epted or b) objected to by the formula of the following of the held in abeyance. See ion is required if the drawing (s) is object. | e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d). | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| A44 | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ate | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 and 13 recite the active step of determining a phase of an electric current based on a number and an arrangement of the electrodes. This appears to lack support in the specification. If the applicant feels that the specification does describe a determining step, please point out the specific page and lines in the specification that does so.

Response to Arguments

2. Applicant's arguments filed August 24, 2007 have been fully considered but they are not persuasive. The limitation of "determining a phase of an electric current based on a number and an arrangement of the electrodes" recited in claims 1 and 13 is interpreted to mean actively selecting a phase for an electric current to apply to electrodes that have been arranged in a certain pattern and based on the number of electrodes used. This active step of "determining a phase based on a number" seems

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to encompass any number of electrodes used, for example 12 electrodes or 20 electrodes. The applicant points to specific paragraphs in the specification for examples (i.e. 4, 6, 8 and 9 electrodes) without further elaborating how these examples allow for the broader scope of the amended claim, which encompasses determining a phase based on any number of electrodes.

3. The applicant states that the Applicants' comparison of the six-electrode structures shown in Figures 1 and 6, and the importance of determining the phase of the electric current illustrates the present inventor's understanding of this claimed limitation. The applicant understanding of the claimed invention is not disclosure support for the claimed limitation of determining a phase of an electric current based on any number of electrodes.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Queenie Dehghan whose telephone number is

(571)272-8209. The examiner can normally be reached on Monday through Friday

8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Q Dehghan

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 1700